

PCT10

RAW SEQUENCE LISTINGPATENT APPLICATION: **US/10/089,147**DATE: 07/30/2003
TIME: 18:04:56

Input Set : A:\089147sq

Output Set: N:\CRF4\07302003\J089147.raw

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3 <110> APPLICANT: Kindl, Helmut
             May, Christian
             Feussner, Ivo
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lipoxygenase mediates
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     10 <130> FILE REFERENCE: 99 1235
     12 <140> CURRENT APPLICATION NUMBER: US 10/089,147
C--> 13 <141> CURRENT FILING DATE: 2002-03-27
     15 <150> PRIOR APPLICATION NUMBER: PCT/EP/00/09912
     16 <151> PRIOR FILING DATE: 2000-10-10
     18 <160> NUMBER OF SEQ ID NOS: 4
     20 <170> SOFTWARE: WordPerfect 6.1
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     39 Gly Asp Leu Ala Gly Ser Val Ile Asn Ala Gly Gly Asn Ile Leu Asp
     40
                    20
     42 aga gtt tcc agt ctt gga gga aac aaa atc aaa ggg aaa gtg att ctt
                                                                          144
    43 Arg Val Ser Ser Leu Gly Gly Asn Lys Ile Lys Gly Lys Val Ile Leu
    46 atg aga agc aat gtt ttg gat ttc act gaa ttt cat tcc aat ctt ctt
    47 Met Arg Ser Asn Val Leu Asp Phe Thr Glu Phe His Ser Asn Leu Leu
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    51 Asp Asn Phe Thr Glu Leu Leu Gly Gly Val Ser Phe Gln Leu Ile
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    54 agt gcc act cat act tca aat gac tca aga ggg aaa gtt ggg aac aag
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    55 Ser Ala Thr His Thr Ser Asn Asp Ser Arg Gly Lys Val Gly Asn Lys
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    58 gca tat ttg gag agg tgg cta act tca atc cca cca ctg ttt gct gga
                                                                          336
    59 Ala Tyr Leu Glu Arg Trp Leu Thr Ser Ile Pro Pro Leu Phe Ala Gly
    60
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    62 gaa tca gtg ttc caa atc aac ttt caa tgg gat gaa aat ttt gga ttt
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63 Glu Ser Val Phe Gln Ile Asn Phe Gln Trp Asp Glu Asn Phe Gly Phe

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64			115					120					125				
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68	110	130	71 <u>1</u> u	1110	LIIC	110	135	71511	OL y	1113	1111	140	Olu	1110	1110	шеч	
	aaa		ctc	act	ctt	aat		att	cct	aac	tat		aga	atc	cat	ttt	480
						-	-	-					Arg	_			100
72	_	Ser	пец	1111	пси	150	лэр	Val	110	Сту	155	Gry	ALG	Val	1113	160	
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													Lys				320
76	vsb	Cys	ASII	Ser	165	vaı	тут	110	261	170	ALG	ı yı	пуз	пуз	175	Arg	
	a++	ttc	+++	acc		cat	at t	tat	ctt		a a t	C22	aca	CCB		cct	576
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80	110	THE	1110	180	ASII	1113	Vai	TYL	185	110	DCI	0111	1111	190	HJII	110	
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		-	_		_		-	_	_			_	Arg		_		024
84	ьeu	Arg	195	ıyı	Arg	Giu	GIU	200	ьeu	пр	ASII	ьęи	205	G т у	лэр	Gry	
	202	aas		202	220	ma a	taa		202	2++	tat	asc.	tat	a t	att	tat	672
													Tyr				072
88	TIIL	210	GIU	Arg	гу	GIU	215	Asp	ALG	тте	туг	220	туг	Asp	vaı	туг	
	22+		a++	act	~~~	act		a++	aat	~a+	ost.		cct	2++	ctc	aat	720
													Pro				720
	225	ASP	116	мта	изр	230	Asp	vaı	GIÀ	Mah	235	Ary	FIO	116	Leu	240	
		3.00	acc	~ ~ ~		230					233					240	732
			Thr														132
	_		EQ II		. 2												
			ENGTE														
		. / 111	TIOLI	1. 2.													
	<21	2> 7	YPE .														
			YPE:	PRI		יותור פ	. sat	· i v ,11 <									
101	<21	.3> (RGAN	PRT	Cuc	cumis	sat	ivus	;								
101 103	<21 <40	.3> ()0> s	ORGAN SEQUE	PRI NISM: ENCE:	Cuc 2					e Gli	ı Gly	v Ala	a Lev	ı Asr	ı Thr	Thr	
101 103 105	<21 <40 Met	.3> ()0> s : Phe	ORGAN SEQUE	PRI NISM: ENCE:	Cuc 2 Gly	, Lys						y Ala	a Leu	ı Asr		Thr	
101 103 105 106	<21 <40 Met	.3> ()0> 5 : Phe	ORGAN SEQUE • Gly	PRT NISM: ENCE:	Cuc 2 Gly	, Lys	: Asr	ı Ile	: I1e	10)				15	;	
101 103 105 106 108	<23 <40 Met	.3> ()0> 5 : Phe	ORGAN SEQUE • Gly	PRINTSM: ENCE: Ile	Cuc 2 Gly Gly	, Lys	: Asr	ı Ile	: Ile	10 n Ala)			ı Ile	15 Lev		
101 103 105 106 108 109	<21 <40 Met Gly	.3> ()0> 5 : Phe - / Asp	ORGAN SEQUE Gly	PRT NISM: ENCE: VIle	Cuc 2 Gly Gly	/ Lys 5 / Ser	: Asr	n Ile	: Ile : Asr 25	10 n Ala 5	O a Gly	y Gl	y Asr	11e 30	15 Leu)	a Asp	
101 103 105 106 108 109 111	<21 <40 Met Gly	.3> ()0> 5 : Phe - / Asp	ORGAN SEQUE E Gly D Leu	PRT NISM: ENCE: Ile Ala 20	Cuc 2 Gly Gly	/ Lys 5 / Ser	: Asr	n Ile L Ile 7 Asr	e Ile Asr 25 Lys	10 n Ala 5	O a Gly	y Gl	y Asr y Lys	ı Ile 30 s Val	15 Leu)	;	
101 103 105 106 108 109 111	<21 <40 Met Gly	.3> ()0> S : Phe - / Asp	ORGAN SEQUE Gly Leu Sei 35	PRI NISM: ENCE: A Ile A Ala 20 E Ser	Cuc 2 2 Gly 5 Gly	/ Lys 5 / Ser 1 Gly	· Asr · Val	n Ile I Ile 7 Asr 40	e Ile e Asr 25 Lys	10 n Ala 5 s Ile	O a Gly e Ly:	y Gly	y Asr y Lys 45	ı Ile 30 s Val	15 e Leu) L Ile	Asp Leu	
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101 103 105 106 108 109 111 112 114 115	<21 <40 Met Gly Arc	.3> (00> S : Phe / Asp / Asp / Asp 5 (5 (DRGAN SEQUE E Gly D Leu Sen 35 J Sen	PRI NISM: ENCE: Ile I Ala 20 Ser Ser Ser	Cuc 2 2 Gly Gly Lev	y Lys 5 7 Ser 1 Gly Leu	Yal Yal Yal Yal Yal Yal Yal Yal Yal	n Ile I Ile / Asr 40 Phe	e Ile Asr 25 Lys)	10 Ala 5 5 Ile 5 Glu	O a Gly e Ly: ı Pho	y Gly s Gly e His 60 l Ses	y Asr y Lys 45 s Ser	Ile 30 Val	15 Le Leu Leu Leu Leu	Asp Leu Leu	
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	тте	Pne	Pne		ASI	HIS	vai	Tyr		Pro	Ser	GIn	Thr		Asn	Pro	
139	T	71	T	180	7	61	01	~1	185	_	_	_	_	190	_	~ 1	
	Leu	Arg		Tyr	Arg	GIU	GIU		ьeu	Trp	Asn	Leu		Gly	Asp	GTA	
142	m1	G1	195	7	Ŧ	61		200		~ 1	_	_	205	_		_	
	Inr		GIU	Arg	ьуѕ	GIU		Asp	Arg	Ile	Tyr		Tyr	Asp	val	Tyr	
145	7	210	T1 -	71	7	Б	215	** 1	~ 1	_		220	_	1	_		
		Asp	тте	Ата	Asp		Asp	vaı	GTÀ	Asp		Arg	Pro	TTe	Leu	_	
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		0> S1															
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177	~ ~ +	~++	++	~	40					45					50		0.40
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181	ASII	Val	ьeu		Pne	Thr	GTU	Pne		Ser	Asn	Leu	ьeu	_	Asn	Phe	
	2.at	~~~	a+ a	55	~~+	~~+	~~+		60					65			200
										ttc							296
185	1111	GIU	70	Leu	СТУ	СТУ	GTÀ		ser	Phe	GIII	ьeu		ser	Ala	Thr	
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107	Uic	aCL Thr	Cox	Adl Nan	yac	cca	aga	ggg	aaa	gtt	ggg	aac	aag	gca	tat m	ttg	344
189	urs	85	261	ASII	ASP	ser	90	GTÀ	гуѕ	Val	GIY		гÀг	Ата	Tyr	ьeu	
	a > a		+~~	at a	2.0±	+				a b ~		95					200
										ctg							392
193		AIG	пр	ьеu	1111	105	тте	Pro	Pro	Leu		Ата	GIA	GIU	ser		
		Car	a+ c	220	+++		+~~	~~+	~~~	2 2 ±	110	~~~	+++	000	~	115	440
106	Dho	Cla	Tic	adC Acr	Dho	Cdd	ryg Too	yai	yda	aat	Dha	gga	Dha	cca	gga	gct	440
197	riie	GIII	тте	HSII	120	GIII	rrp	ASP	GIU	Asn	rne	стÀ	rne	Pro	_	нта	
	++~	++~	2+2	222		~~~	a - +	265		125			- t -		130	a.L	400
200	Dha	Dha	ald Tla	add	adt Acs	gga	Cdt	aCa mb-	agt	gaa	CCC	בעד	CCC	aaa	CCT	CTC	. 488
200	riie	rne	тте		ASII	стА	птѕ	1111		Glu	rne	rne	ьeu		ser	ьеи	
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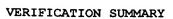
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207	Ser	Trp	gtt	tac Tyr	cct Pro	tct Ser	Gly	aga	tac Tyr	aag Lys	aaa Lys	Asp	160 cgc Arg	att Ile	ttc Phe	ttt Phe	584
211 212	gcc	165 aat Asn	cat His	gtt Val	tat Tyr	ctt Leu 185	170 cca Pro	agt Ser	caa Gln	aca Thr	cca Pro 190	175 aac Asn	cct Pro	ctt Leu	cgt Arg	Lys	632
215	tat	aga Arg	gag Glu	gaa Glu	gaa Glu 200	ttg	tgg Trp	aat Asn	ttg Leu	aga Arg 205	gga	gat Asp	gga Gly	aca Thr	gga Gly 210	195 gaa Glu	680
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232	aga Arg 260	gac Asp	cac His	aat Asn	tat Tyr	gag Glu 265	agc Ser	aga Arg	ttg Leu	tca Ser	cca Pro 270	ata Ile	atg Met	agc Ser	tta Leu	gac Asp 275	872
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252 253	Phe 340	Lys	Thr	Leu	Thr	Glu 345	Asp	Leu	act Thr	Pro	Pro 350	Leu	Phe	Lys	Ala	Leu 355	1112
256 257	Val	Arg	Asn	Asp	Gly 360	Glu	Lys	Phe	ctc Leu	Lys 365	Phe	Pro	Thr	Pro	Glu 370	Val	1160
260 261	Val	Lys	Asp	Asn 375	Lys	Ile	Gly	Trp	agc Ser 380	Thr	Asp	Glu	Glu	Phe 385	Ala	Arg	1208
264 265	Glu	Met	Leu 390	Ala	Gly	Pro	Asn	Pro 395	cta Leu	Leu	Ile	Arg	Arg 400	Leu	Glu	Ala	1256
267	ttt	сса	cca	aca	agt	aag	ctt	gac	cca	aat	gtt	tat	ggg	aat	caa	aac	1304

RAW SEQUENCE LISTING DATE: 07/30/2003 PATENT APPLICATION: US/10/089,147 TIME: 18:04:56

Input Set : A:\089147sq

Output Set: N:\CRF4\07302003\J089147.raw

	58 : 59	Phe	Pro 405	Pro	Thr	Ser	Lys	Leu 410	Asp	Pro	Asn	Val	Tyr 415	Gly	Asn	Gln	Asn	
		ant		atc	act	gaa	gaa	cac	ata	aad	cat	aat	tta	gat	aat	ctt	acq	1352
							Glu											
			IIIT	тте	IIII	GIU		птэ	тте	гу	птэ		пеп	изр	Gry	пеп		
		420					425					430					435	
							aag											1400
27	76 '	Val	Asp	Glu	Ala	Met	Lys	Gln	Asn	Arg	Leu	Tyr	Ile	Val	Asp	Phe	His	
2			-			440	-			_	445	_			_	450		
		nat	acs.	++>	ata		tat	ctt	aca	agg	ato	aat	aca	aca	tca	aca	aaa	1448
							Tyr											
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	31				455					460					465			1.406
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28	34	Thr	Tyr	Ala	Thr	Arg	Thr	Leu	Leu	Leu	Leu	Lys	Asp	Asp	Gly	Thr	Leu	
28	35			470					475					480				
28	37	aaq	cca	tta	att	att	gag	tta	qcc	ttq	cca	cat	cct	caa	qqa	gat	caa	1544
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							aaa											1332
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		500					505					510					515	
							ttg											1640
2	96	Lys	Ser	Ile	Trp	Gln	Leu	Ala	Lys	Ala	Tyr	Val	Thr	Val	Asn	Asp	Val	
	97	-			_	520					525					530		
		aac	tac	cat	caa		att	agt.	cat	t.ga	tta	cat	act	cat	act	σta	ctt	1688
31	าก	G1 17	Tur	Hic	Gln	Len	Ile	Sar	Hie	Trn	T.e.ii	His	Thr	His	Δla	Val	T.e.11	
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							gca											1/30
		Glu	Pro		Val	TTe	Ala	Thr		Arg	GIN	Leu	Ser		ьeu	HIS	Pro	
	05			550					555					560				
30	07	atc	cat	aàg	ttg	ctt	gtt	cct	cat	tac	aaa	gac	act	atg	ttt	ata	aat	1784
30	80	Ile	His	Lys	Leu	Leu	Val	Pro	His	Tyr	Lys	Asp	Thr	Met	Phe	Ile	Asn	
30	9		565	-				570					575					
		aca	tct	gca	aga	caa	gtt	tta	atc	aat	acc	aat	aat.	ctt	atc	gaa	aca	1832
							Val											
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							aaa											1000
		Thr	His	Tyr	Pro		Lys	Tyr	Ser	Met		Leu	Ser	Ser	шe		Tyr	
	17					600					605					610		
3:	19	aag	gat	tgg	acc	ttc	cct	gat	caa	gca	tta	cct	aat	aat	ctc	atg	aag	1928
3:	20	Lys	Asp	Trp	Thr	Phe	Pro	Asp	Gln	Ala	Leu	Pro	Asn	Asn	Leu	Met	Lys	
	21	_	_	_	615			_		620					625			•
		aga	gga	cta	act	ata	gag	gac	tica	agt.	acc	ccc	cat	gga	ctt	aσa	tta	1976
							Glu											
		1119	OLY		1114	var	OLU	nop	635	001				640	200	9		
	25			630		<b>_</b>				<del></del> -		ساسم سم	a++		~	+	+	2024
							cca											2024
		Leu		Asn	Asp	Tyr	Pro		Ala	Val	Asp	GLY		Asp	тте	Trp	ser	
	29		645					650					655					
3.	31	gcc	att	aaa	aca	tgg	gta	cag	gat	tat	tgc	tgt	ctc	tac	tac	aaa	gat	2072
							Val											
				-		-			-	-	-	-		-	-	-	_	



PATENT APPLICATION: US/10/089,147

DATE: 07/30/2003 TIME: 18:04:57

Input Set : A:\089147sq

Output Set: N:\CRF4\07302003\J089147.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date